

AMENDMENTS TO THE CLAIMS:

1. (Currently amended) A system of parsing unstructured or partially structured name and address data in any language or script; said system processing at least portions of said data in an incremental manner comprises multiple parsing steps, each parsing step performed by consulting an inference engine that utilizes an inference strategy.
2. (Original) The system of Claim 1 wherein said processing in an incremental manner comprises multiple parsing steps, each parsing step performed by consulting an inference engine.
3. (Previously presented) A knowledge base for use in association with the system of Claim 1, said knowledge base analyzing said data at one or more predefined levels of analysis.
4. (Original) The knowledge base of Claim 3 wherein said levels include a level of analysis at a lexico-grammatical level.
5. (Original) The knowledge base of Claim 3 wherein said levels include a level of analysis at an orthographic level.
6. (Original) The knowledge base of Claim 3 wherein said levels include a level of analysis at a semantic level.
7. (Original) The knowledge base of Claim 3 wherein said levels include a level of analysis at a contextual level.
8. (Original) The knowledge base of Claim 3 wherein said knowledge base uses a knowledge representation language which embodies linguistic theory.
9. (Original) The knowledge base of Claim 8 wherein said linguistic theory is that of systematic functional linguistics
10. (Previously presented) The knowledge base of Claims 8 wherein said linguistic theory enables the complete representation of all possible forms of said data.
11. (Original) The knowledge base of Claim 10 wherein said data is attribute data.
12. (Original) The knowledge base of Claim 11 wherein said attribute data is name and address data.
13. (Withdrawn) A method of parsing an attribute data set; said method comprising incrementally refining elements of said data set until a predefined level of meaning is determined.

14. (Withdrawn) The method of Claim 13 wherein said step of incrementally refining said elements includes execution of an elaboration operator.
15. (Withdrawn) The method of Claim 13 wherein said step of incrementally refining said elements includes execution of an encapsulation operator.
16. (Withdrawn) The method of Claim 13 wherein said step of incrementally refining said elements includes execution of an enhancement operator.
17. (Withdrawn) The method of Claim 13 wherein said step of incrementally refining said elements includes execution of an entailment operator.
18. (Withdrawn) The method of Claim 13 wherein said step of incrementally refining said elements includes execution of an extension operator.
19. (Withdrawn) The method of Claim 13 wherein a best-first searching algorithm is utilized.
20. (Withdrawn) The method of Claim 13 wherein a look-ahead algorithm is utilized.
21. (Previously presented) The system of Claim 1 wherein an inference strategy is utilized.
22. (Withdrawn) A system for processing an unstructured or partially structured set of data so as to obtain a set of structured data; said system comprising a parser engine in communication with a knowledge database.
23. (Withdrawn) The system of Claim 22 wherein said parser engine is reliant on data in the form of knowledge retained in said knowledge database.
24. (Withdrawn) The system of Claim 22 further including a temporary data store associated with said parser engine.
25. (Withdrawn) The system of Claim 24 further including a data block identifier which provides input to said parser engine.
26. (Withdrawn) The system of Claim 25 wherein said data block identifier breaks said set of unstructured data into a plurality of data blocks for input to said parser engine.
27. (Withdrawn) The system of Claim 26 wherein said parser receives consecutive ones of said data blocks and performs a first association step on said data blocks based on knowledge derived from said knowledge database so as to derive a first postulated categorization of said data blocks and storing said data blocks thereby categorized in said temporary storage means.

28. (Withdrawn) The system of Claim 27 wherein said parser engine performs a confirmation step on said data blocks stored in said temporary storage means so as to either confirm or reject its categorization of said data blocks.
29. (Withdrawn) The system of Claim 22 wherein said knowledge base includes knowledge about the information structures of identifying attribute objects.
30. (Withdrawn) The system of Claim 22 wherein said knowledge database includes knowledge about an association between patterns and the identifying attribute objects they represent.
31. (Withdrawn) The system of Claim 22 wherein a precedence of alternative solutions has been precompiled in said knowledge database thereby to allow best-first searching to be performed by said parser engine.
32. (Withdrawn) The system of Claim 22 wherein said parser engine utilizes a best-first searching algorithm.
33. (Withdrawn) The system of Claim 22 wherein said parser engine utilizes a look-ahead algorithm.
34. (Withdrawn) The system of Claim 22 wherein said parser engine utilizes an inference strategy.
35. (Previously presented) The system of Claim 1 wherein said data comprises attribute data.
36. (Original) The system of Claim 35 wherein said attribute data comprises name and address data.
37. (Withdrawn) The system of Claim 22 wherein said data comprises attribute data.
38. (Withdrawn) The system of Claim 37 wherein said attribute data comprises name and address data.
39. (New) A knowledge base for use in association with the system of Claim 1, said knowledge base analyzing said data at one or more of lexico-grammatical, orthographic, semantic and contextual predefined levels of analysis.
40. (New) The knowledge base of Claim 39, wherein said knowledge base uses a knowledge representation language which embodies systematic functional linguistic theory enabling the complete representation of all possible forms of said data, including forms in any language, script or country.

Application No.: 09/883,123

Response to Office Action of 01/31/2005

Attorney Docket: WDUMR-022US

41. (New) The knowledge base of Claim 40, wherein the knowledge representation language contains a knowledge representation layer, a knowledge base management layer, a language inference layer and a language programming interface layer, which together enable the building of a body of executable knowledge about the semantic structures and lexico-grammatical patterns for name and address data in a selected language.

42. (New) The knowledge base of Claim 1, wherein the data is in a first language which may be read and spoken by users, and the results of the parsing system are output in that same language.